

Grassland Bypass Project



&



Grassland Ecological Area

Data Collection & Review Team

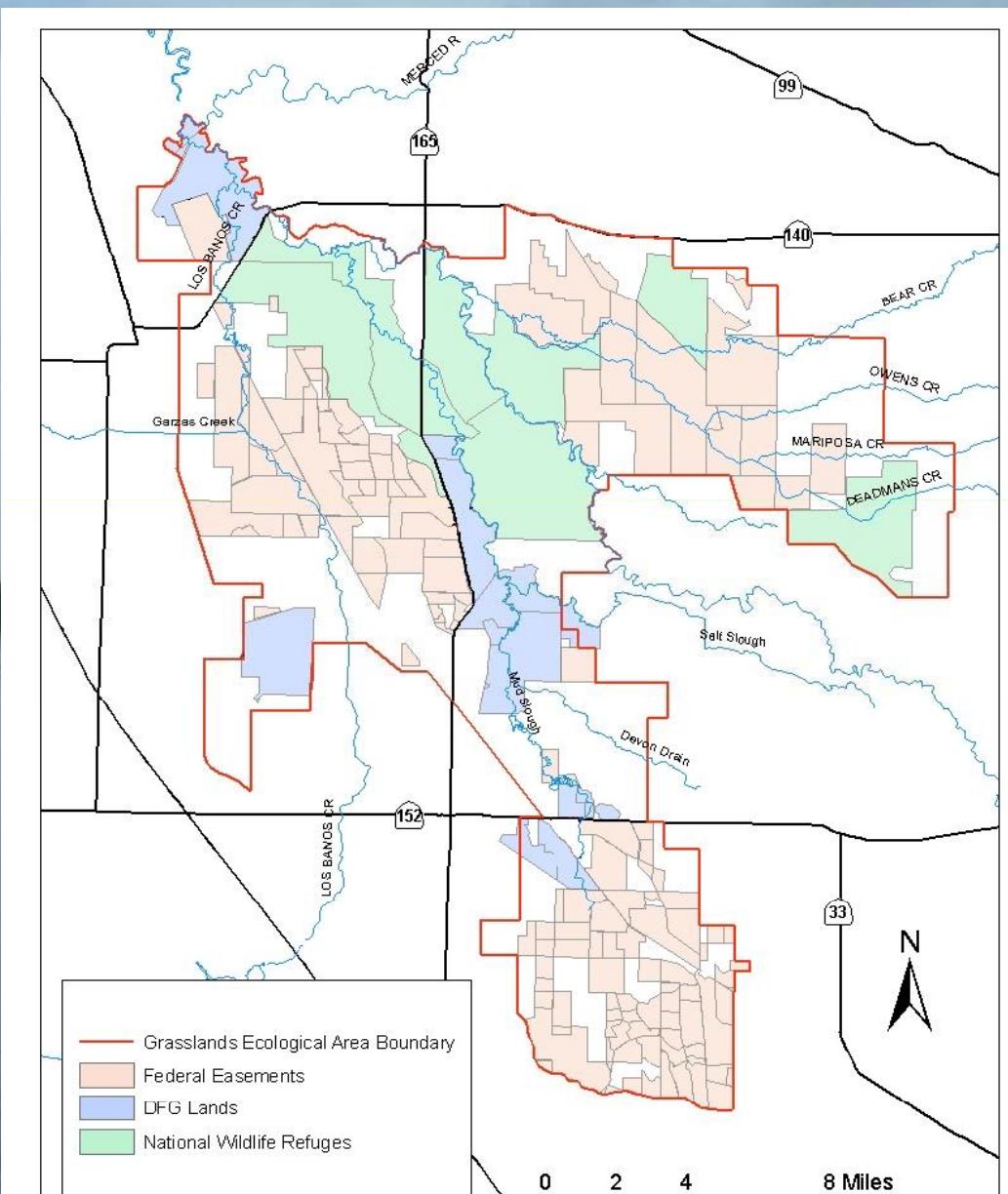
November 17, 2011

Grassland Ecological Area

square mile
(100 acre) GEA
constitutes the
largest contiguous
area in California

Supports
over 1,000,000
waterfowl

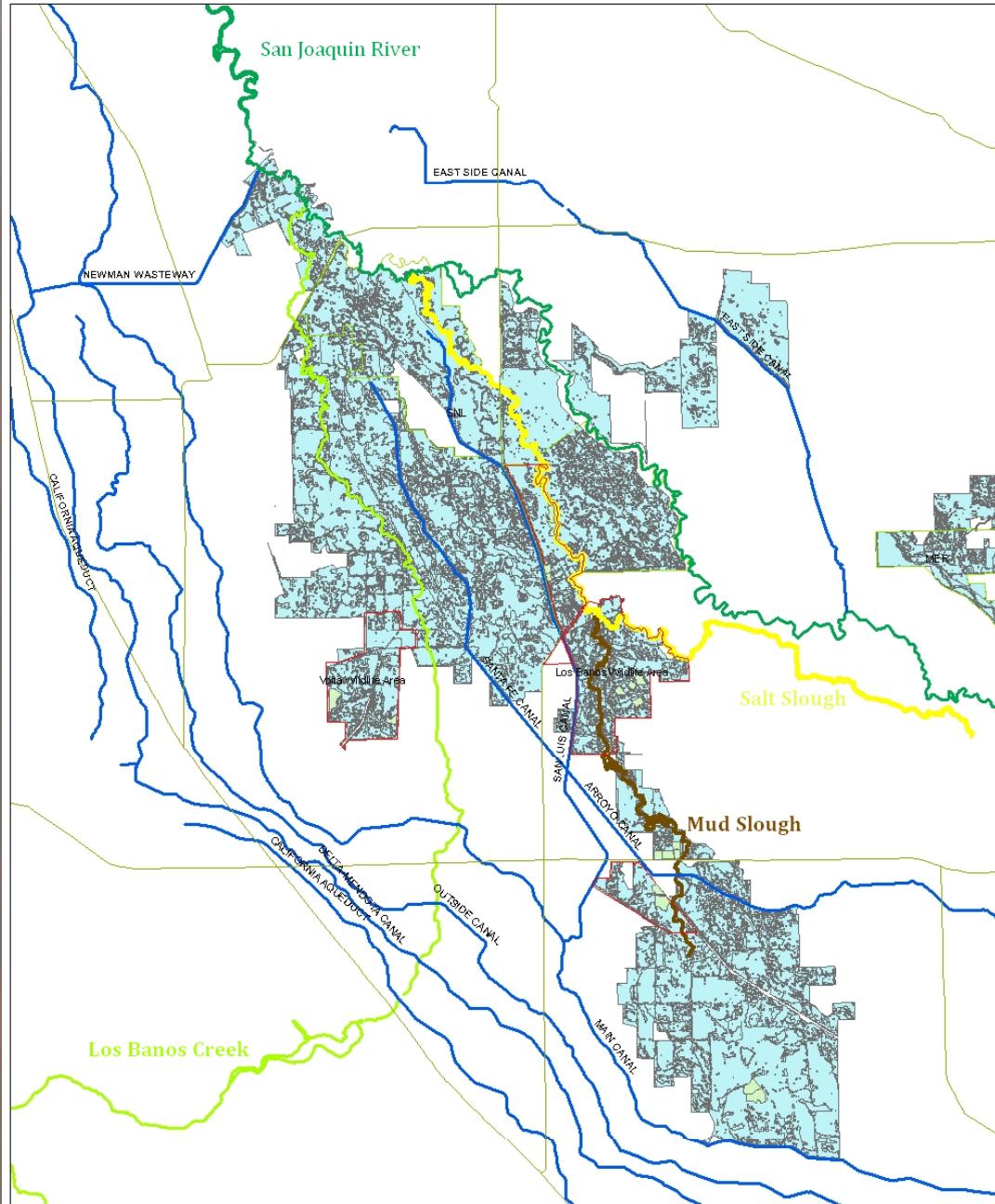
over 200,000
shorebirds



Designated as
Globally
Important
Bird Area

American Bird
Conservancy
&
National
Audubon
Society

05, GEA
ated as a
land of
national
rance and
f only 22
AR sites in
ited States

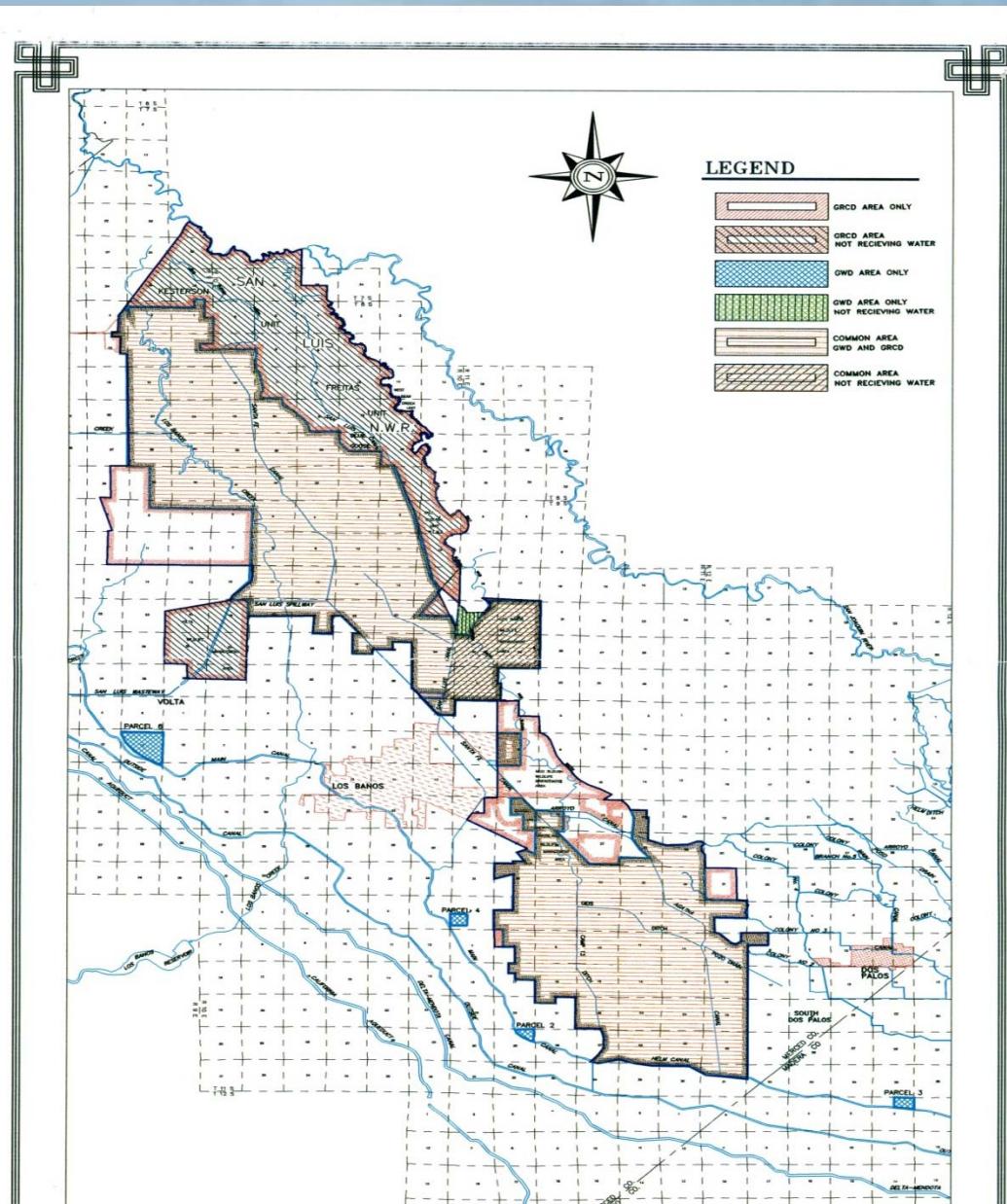


Recognition
in 1991 by the

Western
Hemisphere
Shorebird
Reserve Network-
International
Significant
Shorebird Site

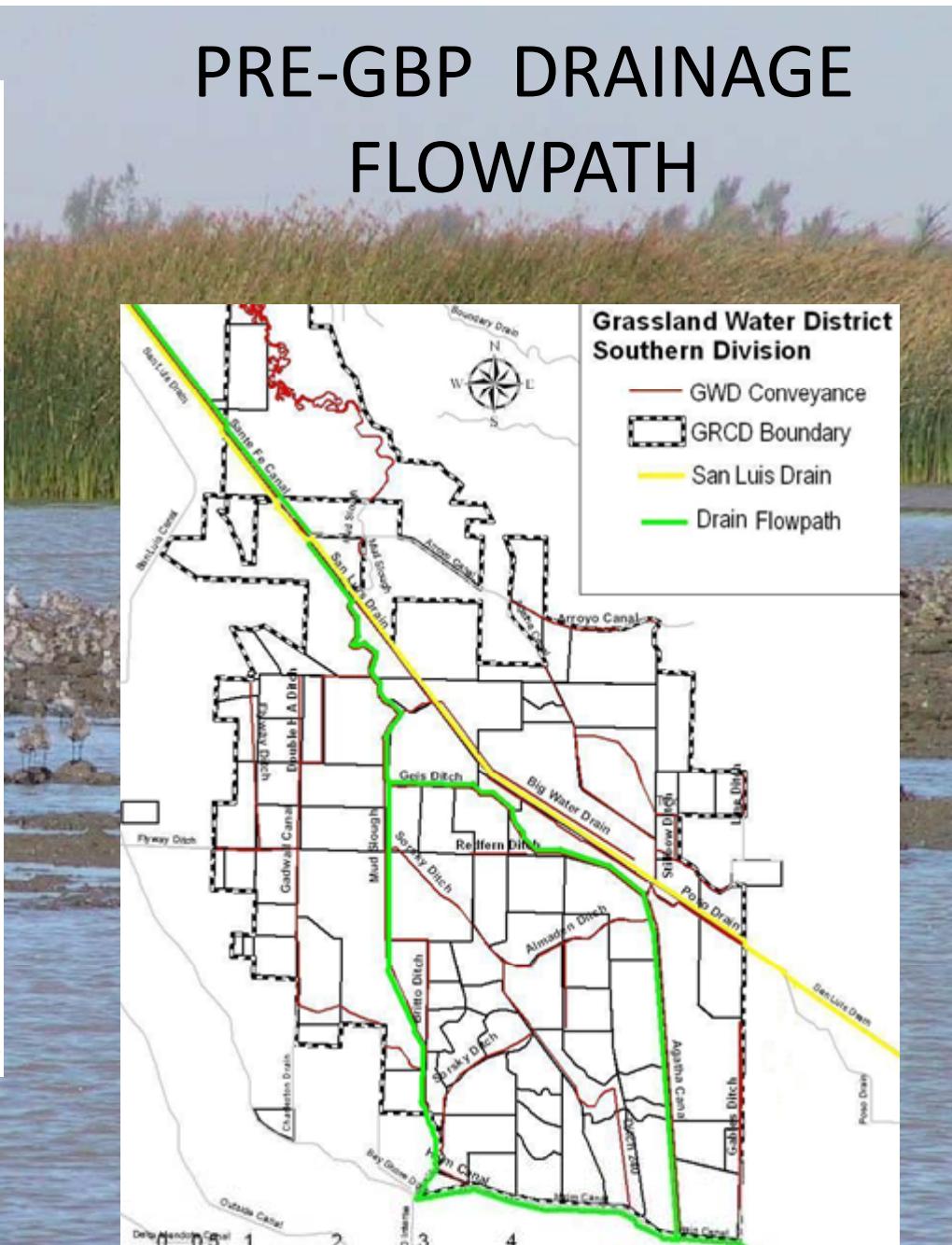
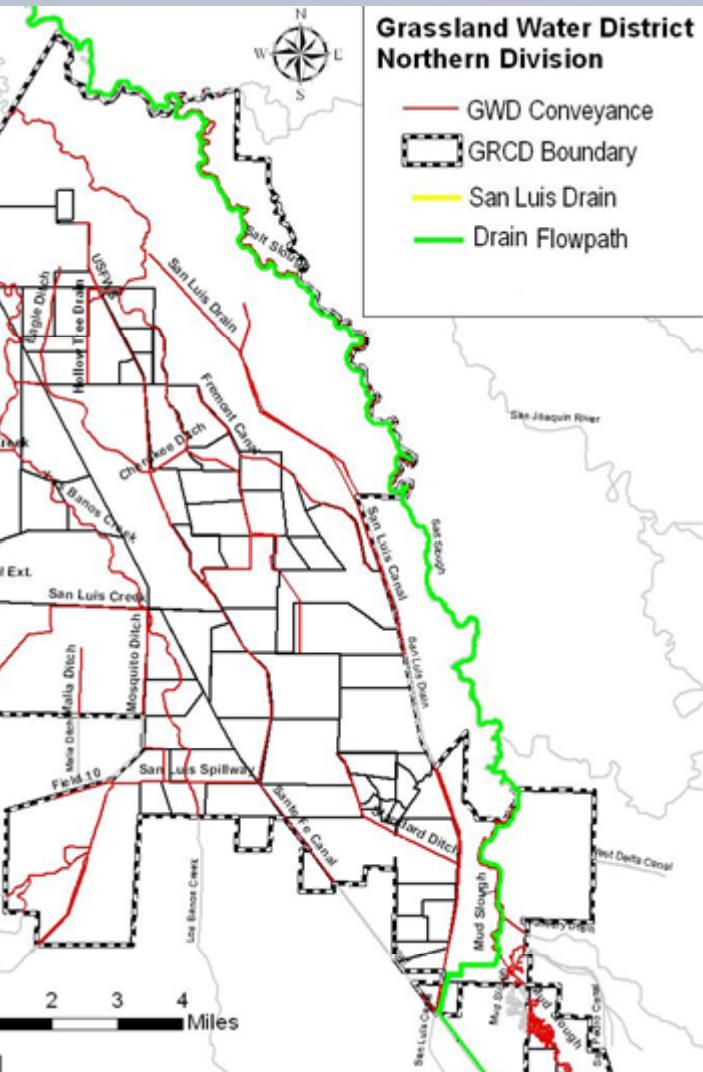
and Resource Conservation District & Grassland Water District

composed of
c & private
lands managed
to provide habitat to
rare species
dependent on the
wetland ecosystem.

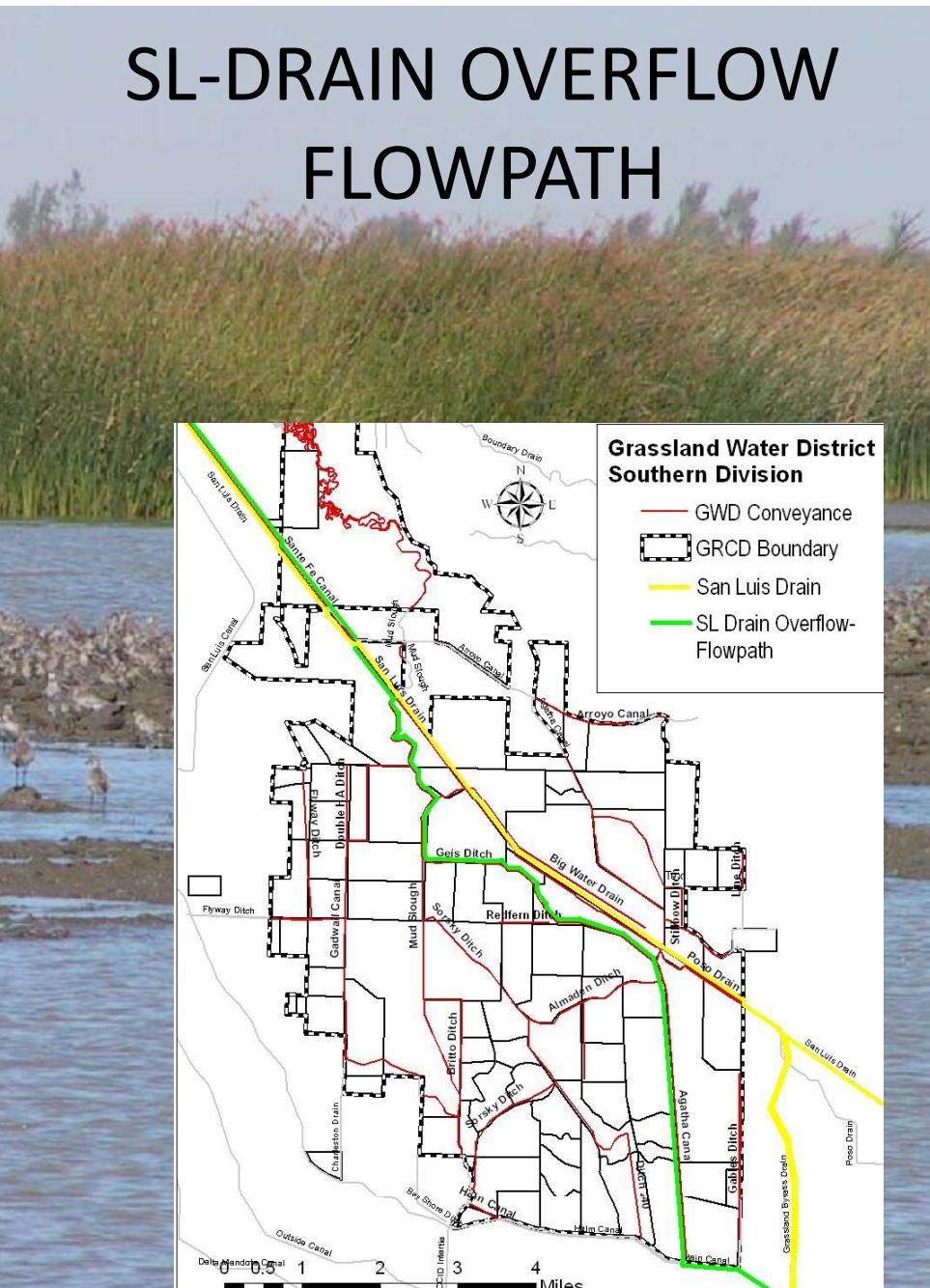
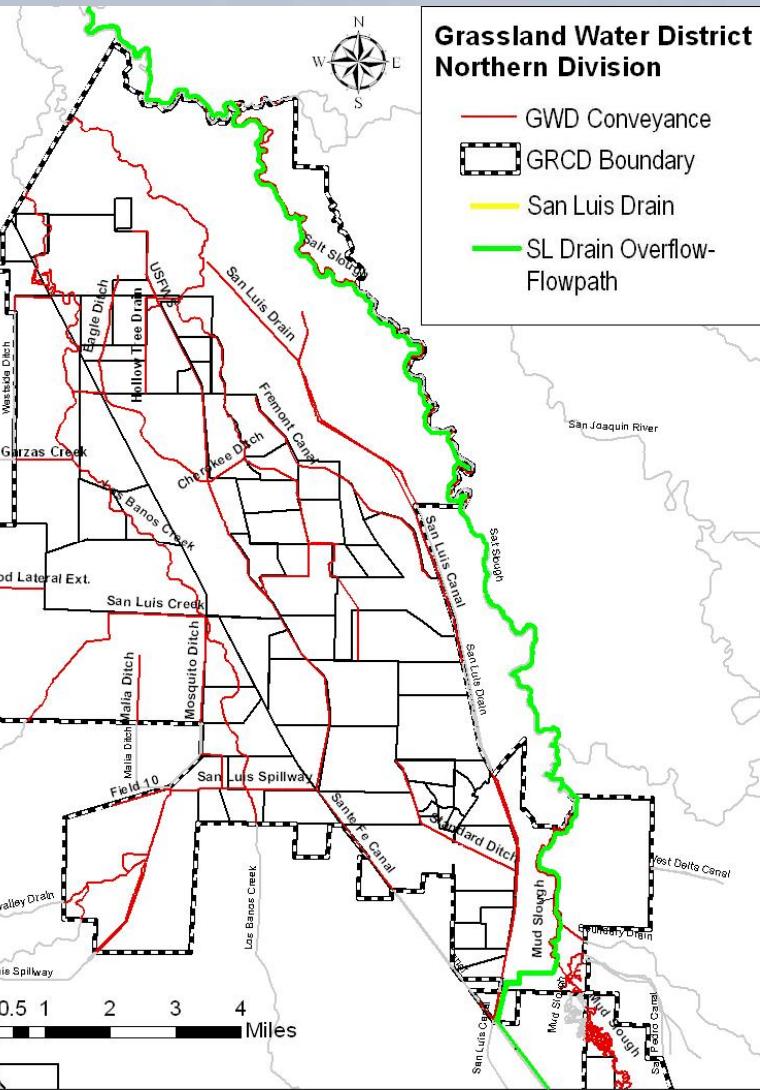


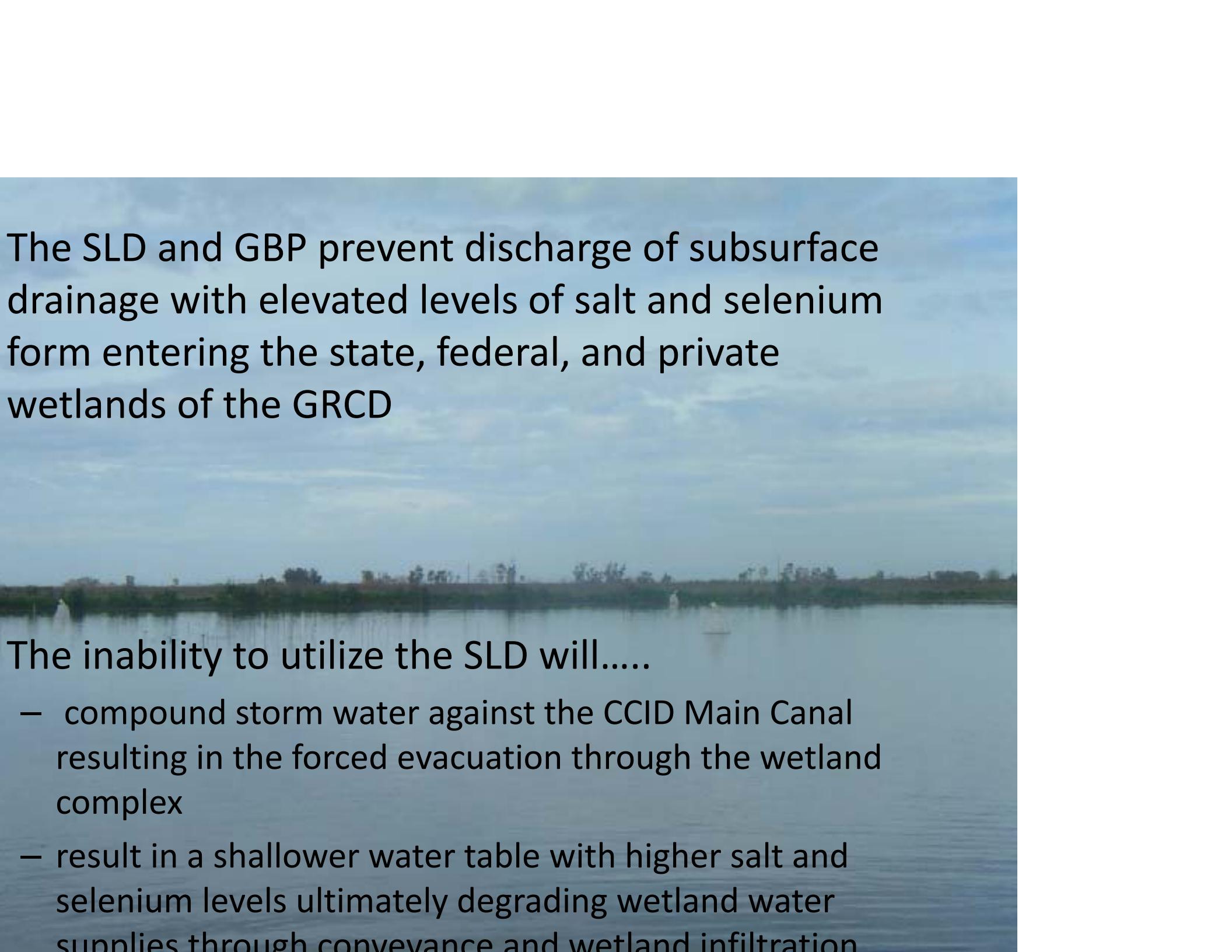
GWD is a public agency established under the California Water Code, which receives and distributes (CVP) water to wetlands of the GRCD.

PRE-GBP DRAINAGE FLOWPATH



SL-DRAIN OVERFLOW FLOWPATH



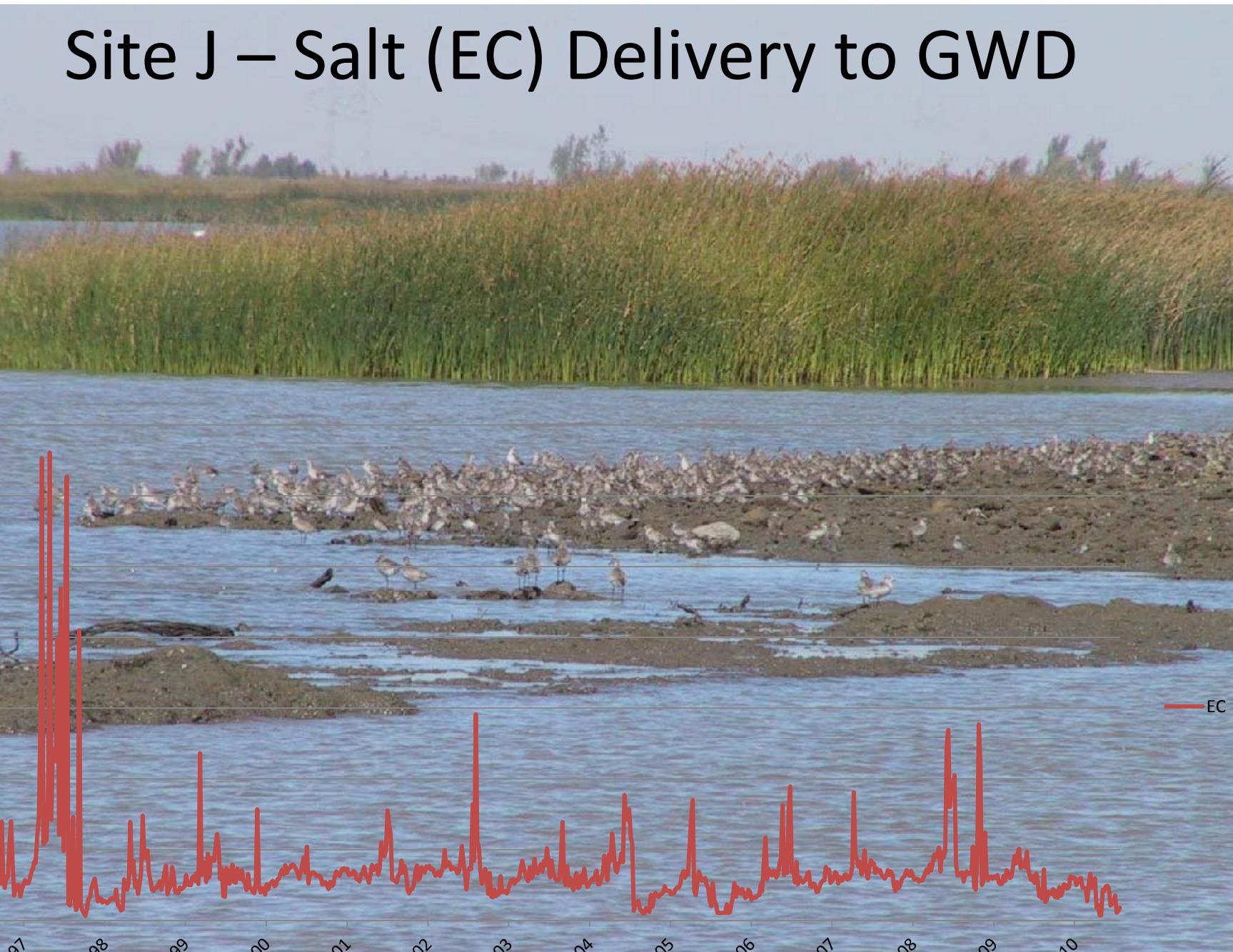


The SLD and GBP prevent discharge of subsurface drainage with elevated levels of salt and selenium from entering the state, federal, and private wetlands of the GRCD

The inability to utilize the SLD will....

- compound storm water against the CCID Main Canal resulting in the forced evacuation through the wetland complex
- result in a shallower water table with higher salt and selenium levels ultimately degrading wetland water supplies through conveyance and wetland infiltration

Site J – Salt (EC) Delivery to GWD



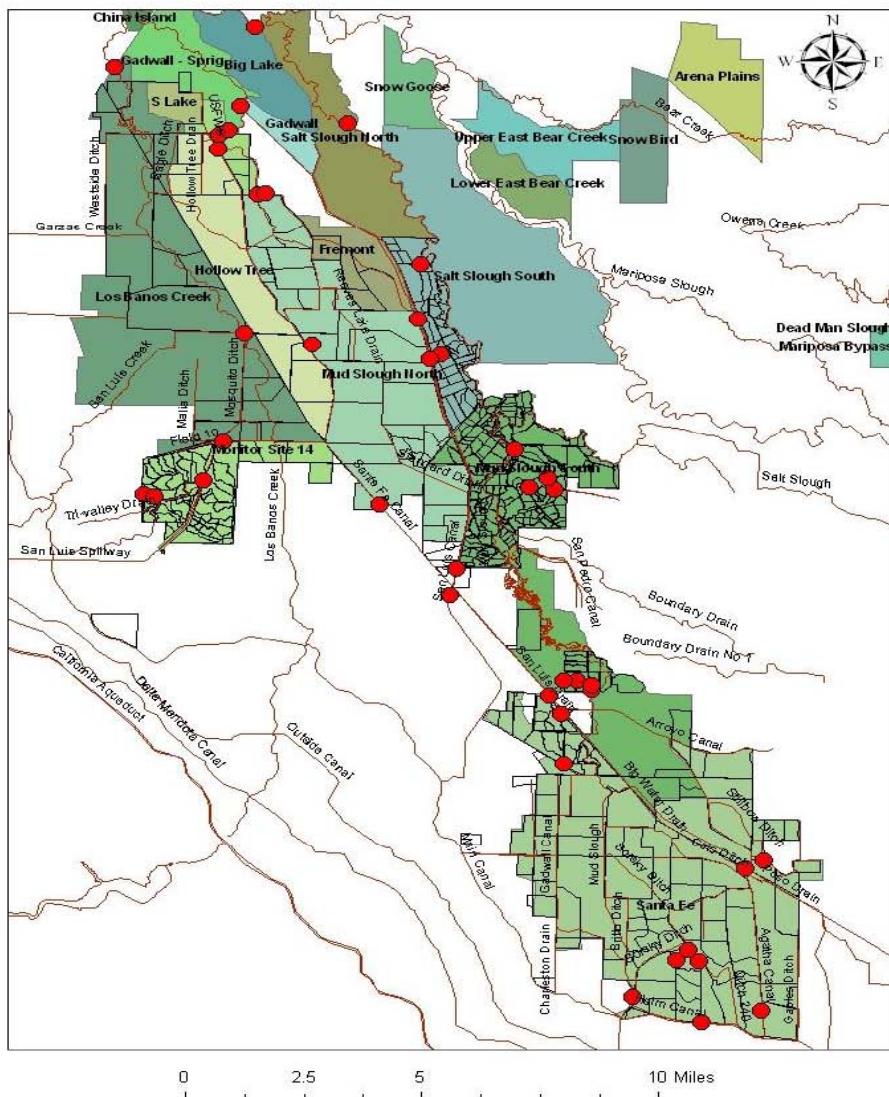
Site J – Se (ppb) Delivery to GWD





Since the implementation of the GBP there have been significant improvements in wetland habitat productivity and water quality
and the improvement of the Grassland Wetlands and the San Joaquin River.

Real Time Water Quality Monitoring -USBR-GWD-USFW-CDFG-GRCD-

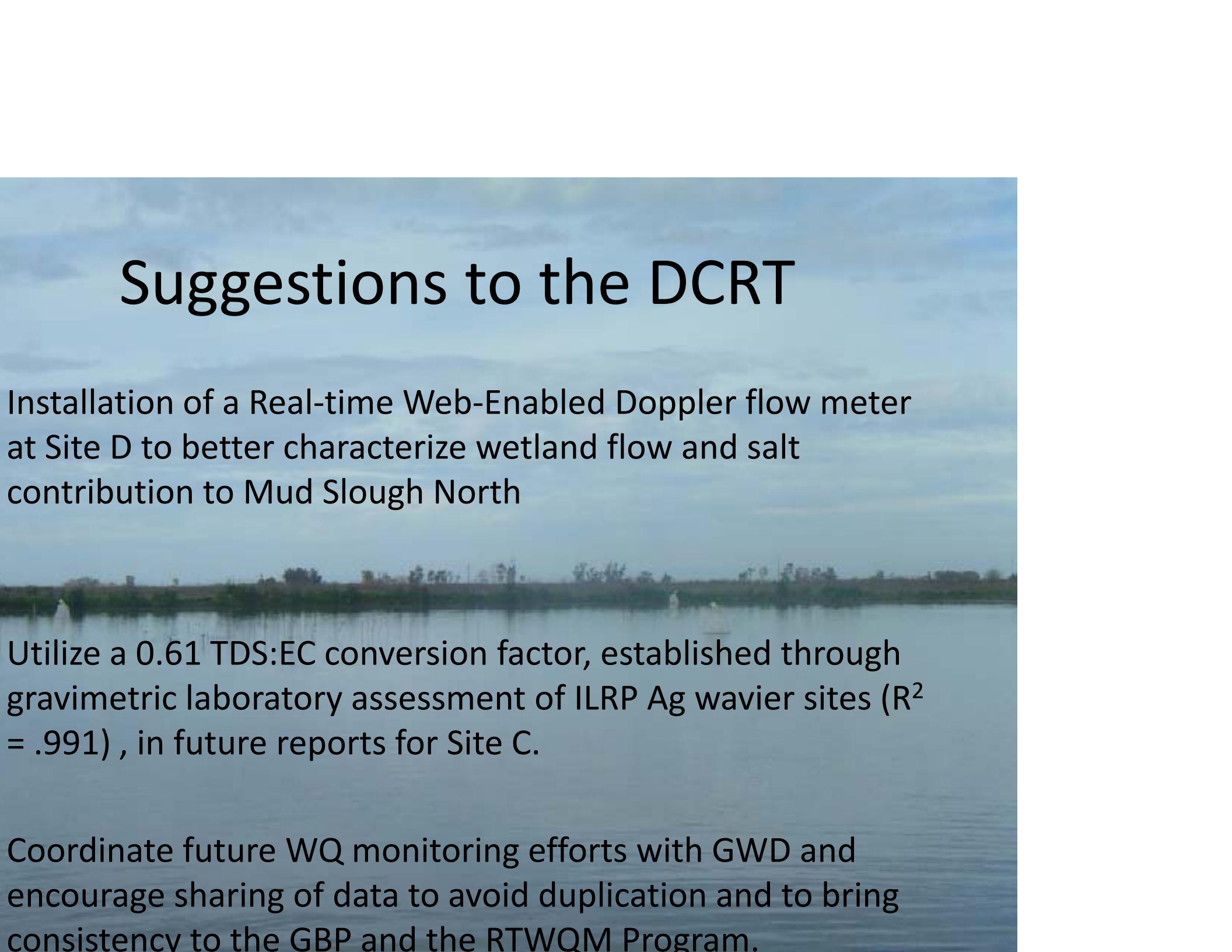


45 Monitoring Station Network

15 Minute Real Time Data

- Temp
- EC
- Flow
- pH

Private Wetlands
US Fish & Wildlife
Grassland Water District
Cal Dept Fish & Game



Suggestions to the DCRT

Installation of a Real-time Web-Enabled Doppler flow meter at Site D to better characterize wetland flow and salt contribution to Mud Slough North

Utilize a 0.61 TDS:EC conversion factor, established through gravimetric laboratory assessment of ILRP Ag wavier sites ($R^2 = .991$) , in future reports for Site C.

Coordinate future WQ monitoring efforts with GWD and encourage sharing of data to avoid duplication and to bring consistency to the GBP and the RTWQM Program.

A photograph of a flock of ducks in flight against a backdrop of a cloudy, overcast sky. The ducks are captured in various stages of their flight, creating a sense of movement. Some are in sharp focus, while others are slightly blurred, indicating depth. The colors of the ducks' feathers range from dark greens and browns to bright yellows and whites.

Questions ?